

Types of Business Analysis

An Additional Help for ADS Chapter 597

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Types of Business Analysis

Appreciative Inquiry

What: Appreciative Inquiry (AI) is a process oriented method for studying and changing social systems organizations that promotes collective inquiry into the best of what is in order to imagine what could be. Al looks at what is going right to improve an organization. The process involves an analysis of the organization, examining its culture, environment, and relationships, to identify and build on existing strengths rather than scrutinizing problems and deficiencies. The differences between AI and a problem-based approach are highlighted below.

Problem Solving	Appreciative Inquiry		
 Felt need, identification of problem(s) 	 Appreciating, valuing the Best of What Is 		
Analysis of Causes	 Envisioning what might be 		
Analysis of possible solutions	 Engaging in dialogue about what should be 		
Action Planning (treatment)	 Innovating, what will be 		

How: There are five phases or steps to guide the process of AI. The aim of these processes is to build (or rebuild) organizations around what works, rather than trying to fix what does not.

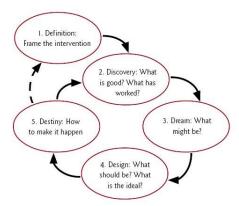
- 1. Define "the what"-identifying the focus of your study. In order to set the tone for the study, the focus should not be worded as a problem, but on how to expand on strength. For example, a focus could be "ways to accelerate staffing" rather than "ways to fix staffing problems." Although this may seem like semantics, it will influence both the character of the questions and the respondents' answers.
- 2. Discover "the best of what is" by identifying where the organization's processes worked perfectly. This phase is done through interviews and focus groups to identify past best practices and what is currently working well. Questions are open ended and written in the affirmative so that people can provide wide-ranging answers and stories about what they find to be valuable. Once the data is collected from the interviews, categorize the responses to determine what was most valued and motivating among respondents. Using this data, you will be able to map the positive core of an organization and gain insight into best practices and innovative ideas and experience.
- 3. Dream "what might be" by envisioning processes that are effective every time. This phase builds on the organization's positive processes and maps how they may be used constructively. In addition to the interview analysis (which should yield best practices) the team also sets up a brainstorming session with a diverse group of stakeholders for additional creative ideas when moving forward. This is often a large conference or workshop for the organization to talk about successful moments within the organization and what the organization would look like if these were the ongoing norms. The facilitator can break the organization into smaller working groups to expand on the organizational vision. This is a collaborative process that is meant to encourage positive interaction among staff. Once a vision is agreed upon the design phase begins.
- 4. Design "what will be" by refining processes and best practices for future use. Once ideas from the interviews and the brainstorming session begin to solidify, you will need to examine how these ideas are implemented. This occurs in a selected working group from the brainstorming session or is explored in breakout groups at the conference or workshop.
 You may choose to implement this in a larger group by designing a "possibilities map" which contains concentric circles of: the dream of an organization; the key relationships that have

- impact on this dream, and the key organizational design elements that will be needed to deliver the dream. In smaller groups, members can discuss these design elements. The smaller group maps the best practices identified and explores innovative ideas to existing systems, processes, and strategies. It also looks at how systems can be tweaked to incorporate the changes needed.
- 5. Deliver "The Plan" by Implementing the Path Forward. The final phase is the largest level of effort for an organization, and it takes a lot of planning and preparation. It is helpful to have smaller working groups to follow up on elements and applicable processes identified within the design phase. The key to success in executing the plan forward is to make sure the vision from phase three, is the focal point for progress. Each member within the organization has their own processes to complete and modify, but true success occurs when all of members provide changes at the same time, thus using positive energy within the study to focus on the vision forward.

When to Use: Appreciative Inquiry's focus on the positive can be useful in helping teams create a safe environment to delve into difficult issues and build group cohesion. It is best used when there is a need to change group dynamics. The approach is highly collaborative and creates energy to enhance teamwork and motivation within an organization.

Al works well when members can identify and link best practices that are already in existence in an organization. New practices are discussed, but the process usually focuses on what already works. Al should be used when members of the organization are aware of best practices and historically successful decisions and can use them to influence future work.

- The Art of Appreciative Inquiry (http://hbswk.hbs.edu/archive/3684.html)
- "A Positive Revolution in Change: Appreciative Inquiry." http://appreciativeinquiry.case.edu/uploads/whatisai.pdf
- Mind Tools. (www.mindtools.com/pages/article/newTMC 85.htm)
- Positive Change (https://positivechange.org/how-we-work/the-appreciative-inquiry-4-d-process/)
- Change Management Blog (http://www.change-management-blog.com/2009/07/change-model-1-4d-model-appreciative.html)



Balanced Scorecard

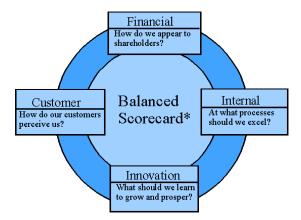
What: Balanced scorecard is a strategic planning and management method used extensively in business and industry, government, and nonprofit organizations worldwide to align business activities with the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals.

How: To construct and implement a balanced scorecard:

- 1. Articulate the vision and strategy;
- 2. Identify the performance categories that best link the vision and strategy to its results;
- 3. Establish objectives that support the vision and strategy;
- 4. Develop effective measures and meaningful standards, establishing both short-term milestones and long-term targets;
- 5. Ensure acceptance of the measures;
- 6. Create appropriate budgeting, tracking, communication, and reward systems;
- 7. Collect and analyze performance data and compare actual results with desired performance; and
- 8. Take action to close unfavorable gaps.

When to Use: Balanced scorecard should be used when it is time to transform an organization's strategic plan into "marching orders." It offers a framework that not only provides performance measurements but helps planners identify what should be done and how it should be measured.

- Balanced Scorecard Institute (http://www.balancedscorecard.org)
- Bain & Company (http://www.bain.com/publications/articles/management-tools-2011-balanced-scorecard.aspx)



Benchmarking

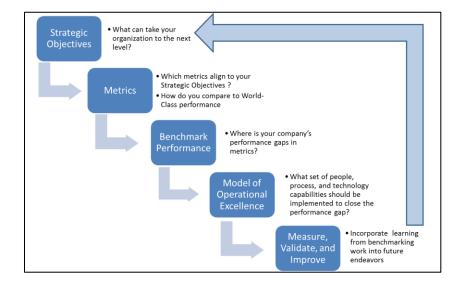
What: Benchmarking is the comparison of one organization's practices and performance against those of others. It is the process of identifying best practices in relation to both products and the processes that create and deliver those products. Managers compare the performance of their products or processes externally with those of competitors and best-in-class companies and internally with other operations that perform similar activities.

How: The critical steps of the benchmarking process are:

- 1. Select a product, service, or process to benchmark to help achieve the strategic objectives;
- 2. Identify key performance metrics;
- 3. Collect data on metrics;
- 4. Choose companies or internal areas to benchmark;
- 5. Collect comparison data on performance and practices;
- 6. Analyze the data and identify opportunities for improvement;
- 7. Adapt and implement the best practices, setting reasonable goals, and ensuring organization-wide acceptance.

When to Use: Benchmarking should be used to identify industry best practices, so an organization can make improvements or adapt specific best practices to increase performance.

- State of Minnesota Management and Budget (http://www.mad.state.mn.us/benchmarking)
- Bain & Company (http://www.bain.com/publications/articles/management-tools-2011-benchmarking.aspx)



Business Process Mapping

What: Business process mapping involves graphically defining what an organization does, who is responsible for each step, and how long each step takes. Business Process Modeling Notations (BPMN) are the graphical objects that comprise the map. For example:

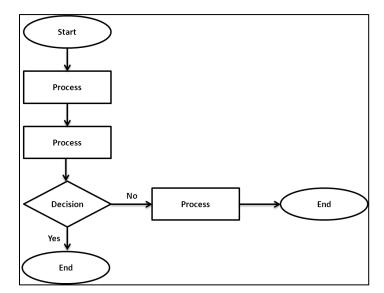
- Ovals show input to start the process or output at the end of the process;
- Boxes or rectangles show tasks or activities performed in the process;
- Arrows show process direction flow; and
- Diamonds show points in the process where a yes/no questions are asked or a decision is required.

How: Guidelines for process mapping include:

- 1. Assemble the core process team;
- 2. Walk through the process using wall paper and "sticky" notes to keep the mapping visual and inclusive;
- 3. Discuss each step in the process and come to agreement on a) who is responsible and b) in what time frame; and
- 4. Document the final map using diagramming software such as Microsoft Visio.

When to Use: Business process mapping should be used when trying to identify specific pain-points and areas where the organization can gain efficiencies.

- Iowa State University (http://www.fpm.iastate.edu/worldclass/process-mapping.asp)
- Stephen A. White, IBM Corporation
 (http://www.omg.org/bpmn/Documents/Introduction to BPMN.pdf)



Change Management

What: Change management is an organizational process aimed at helping stakeholders accept and embrace changes in their business environment. Change management involves the application of a set of tools, processes, skills, and principles for managing the people side of change to achieve the required outcomes of a project or initiative.

How: There are several different models for change management. Kotter's 8-Step Change Model and the ADKAR Model are described here.

Kotter's 8-Step Change Model is a core set of change management activities that need to be performed to effect change and make it stick in the long term. The eight steps are to:

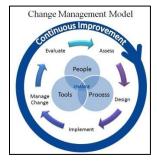
- 1. Create Urgency;
- 2. Form a Powerful Coalition;
- 3. Create a Vision for Change;
- 4. Communicate the Vision;
- 5. Remove Obstacles;
- 6. Create Short-term Wins;
- 7. Build on the Change; and
- 8. Anchor the Changes in Corporate Culture.

The ADKAR (Awareness, Desire, Knowledge, Ability, Reinforcement) Model is used to identify resistance to change, aid in the transition process, create an action plan for advancement during the change process, and identify why changes may not be working. ADKAR involves creating:

- 1. Awareness of the need to change;
- 2. Desire to participate and support the change;
- 3. Knowledge of how to change (and what the change looks like);
- 4. Ability to implement the change on a day-to-day basis; and
- 5. Reinforcement to keep the change in place.

When to Use: Change management methodologies should be used to assess the organization's ability to change and reform and guide the organization through change.

- Change Management Learning Center (http://www.change-management.com/tutorial-adkar-overview.htm)
- Kotter International (http://www.kotterinternational.com/our-principles/changesteps/changesteps)
- Mind Tools (http://www.mindtools.com/pages/article/newPPM 87.htm)



Cost-Effectiveness Analysis

What: Cost-Effectiveness Analysis (CEA) is a formal process for organizing information so that the cost of alternatives and their relative effectiveness in meeting a given objective can be compared systematically.

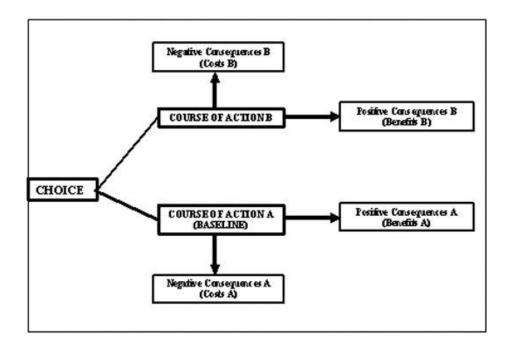
How: CEA involves three processes:

- 1. An analysis of the cost of each alternative;
- 2. An analysis of the effectiveness of each alternative; and
- 3. An analysis of the relationship between the cost and effectiveness of each of alternative, usually expressed as a ratio.

Operating units should use cost-effectiveness as a criterion in comparing alternatives and decision-making. A strategic option is cost-effective when it achieves the objective with the minimum expenditure of resources.

When to Use: Similar to a trade-off analysis, CEA should be used when there are multiple options up for consideration with multiple decision makers, stakeholders, and other interested parties making inputs to the decision making process. However, the only two decision criteria used are cost and effectiveness.

- World Health Organization
 (http://www.who.int/choice/publications/p 2003 generalised cea.pdf)
- Department of Veteran Affairs (http://www.herc.research.va.gov/methods/cea.asp)



Desk Review

What: Desk reviews, or secondary research, involve the summary, collation, and/or synthesis of existing research and documentation. In contrast, primary research involves data collection from, for example, research subjects or experiments. Secondary sources could include agency policy, previous research reports, documented business processes, databases, and government and nongovernmental organization statistics.

How: Steps for a desk review include:

- 1. Develop a list of sources, a list of good starting points promises more than just looking at one particular source;
- 2. Document, organize, and file key information gleaned from research; and
- 3. Document the full citation of original sources, usually in the form of a complete listing or annotated listing.

When to Use: Desk reviews should be completed at the beginning of a business analysis to determine what is already known, what new data are required, and to inform research design.



Fishbone Analysis

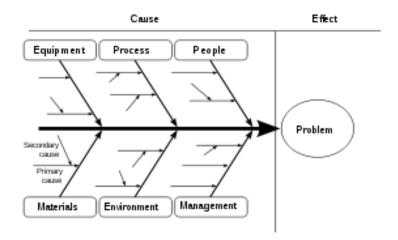
What: Fishbone analysis is a graphic tool to explore effects and the causes that create or contribute to those effects. These causes can then be targeted for improvement.

How: Steps for creating a fishbone analysis include:

- 1. Develop a problem statement: Place the problem statement at the head of the "fish." This is the end effect from which causes will be mapped. Draw a line toward the head of the fish. This is the fish's "backbone."
- 2. Begin to categorize: Start listing major steps in the business or service process, and connect them to the backbone in "ribs." There is no specific number of steps or categories needed to describe the problem.
- 3. List contributing factors: Brainstorm possible problem causes, and attach each to the appropriate rib. When brainstorming, it might be helpful to place ideas on category ribs as they are generated, or to brainstorm an entire list of ideas and then place them on ribs all at once.
- 4. Ask why for each factor: Repeatedly ask why that factor is present.
- 5. Look for deeper causes: There could be multiple branches off of each successively smaller rib. A team might lack expertise, for example, because of a lack of training, but also because the right people weren't hired for the job. Treat each contributing factor as its own "mini-rib," and keep asking why each factor is occurring.
- 6. Test for root causes: Test for root causes by looking for causes that appear repeatedly within categories or across major categories.

When to Use: Like problem tree analysis, fishbone analysis should be used when trying to determine the root cause(s) of a problem or when there are several problems identified which are competing for attention from management.

- University of Notre Dame (http://www.notredameonline.com/what-is-fishbone-diagram/)
- State of Minnesota Department of Health
 http://www.health.state.mn.us/divs/cfh/ophp/consultation/qi/resources/toolbox/fishbone.html)



Open Space Technology

What: Open Space Technology (OST) is an unstructured approach for meetings, retreats, workshops, and strategic planning sessions. OST focuses on a specific purpose or theme, but begins without a formal or prepared agenda. Instead, meeting participants develop the agenda when they meet. Once participants form the agenda, they discuss topics in working groups.

How: There are many variations of how to use OST. Below is a brief "user's guide" to be modified depending on the organization, facilitator and issues at hand.

Invitations: Keep invitations short and non-prescriptive. Include important details, such as the time and place of the meeting, and clearly explain the theme of the event. Attendance should not be mandatory. You only want participants who are passionate and interested in the theme. However, you should explain the meeting theme and the implications of not attending (For example, if you attend, you will be able to influence the future strategy of USAID, while not attending will signal a lack of interest in doing so). The invitation should also explain that the meeting will be unstructured until participants arrive. Let participants know that they are the ones driving the conversation.

Most importantly, keep the invite intriguing and exciting—OST relies on positive "safe space" for dynamic discussions and participation.

• Facilitator: OST uses only one facilitator. It is important that that person does not instruct or control the day—rather he or she should help the group manage their own space and time. The facilitator should encourage, engage and empower participants and should not have "all the answers".

Logistics:

- Materials: A matrix with sticky notes (to display times for two-hour breakout sessions), markers, flip charts, tape, and paper.
- Room: The main room should big enough to allow all attendees to sit in a circle. There
 should be one unobstructed wall to tape the group schedule and key concepts. There
 should be additional rooms for the workgroups. Around five breakout rooms should be
 available for a group of 100 people.
- Time: Events should usually last at least a day. If you want a higher level of reporting out, they should last two days. Make sure people are clear that they need to participate fully and not drop in and out of the meeting. Lunch should be eaten when the participants want to and people should be allowed to take self-selected breaks. Working groups may begin later or finish earlier than the allotted time. Once the Facilitator develops the approximate times for break out groups, time should flow organically without constraints from the Facilitator or other members.
- **Introduction:** Everyone should sit in a circle. The Facilitator should explain the theme of the day, expectations of what people and the group will produce, and the "rules" of OST. The theme should be explained in an evocative, not descriptive or prescriptive, manner. Within the first

hour, the group should know what they are doing, have created agendas (task groups, discussion groups etc.) and be ready to work. Introductions must be energetic and short. As introductions are made, the wall behind the facilitator should have an "important concepts" poster (described below) and space for a bulletin board where people can post ideas.

 Bulletin Board: After explaining the theme, the facilitator should introduce the concept of the bulletin board. The bulletin board should be a space where people can put their topics for working group discussions with an associated breakout room and time.

Invite people to the middle of the circle, to state their name and present their idea for discussion. Participants should write both on a piece of paper and post it on the wall. Once they have placed it on the wall they will need to take a sticky from the room schedule matrix (which has room availabilities with a time on each sticky) and put the sticky on their idea. Each session should be around two hours. Once people are done posting their ideas and corresponding times for their breakout groups the facilitator should help organize each group by putting morning session on the far left, noon sessions in the middle, and afternoon session's on the far right.

- Market Space: The facilitator should then "open the market space," where participants sign up for the groups they are interested in. If someone wants to combine groups, the author of the group can decide whether or not to.
- **Important Concepts:** Once everyone has signed up for their groups, the facilitator needs to explain important concepts for the day (these should be already hanging on the wall).
 - The Four Principles
 - 1. Whoever comes are the right people. If no one comes to a working group, that issue may not be relevant or important to the overall group.
 - 2. Whatever happens is the only thing that could have.
 - 3. Whenever it starts is the right time. If a discussion takes a while to be productive that it is okay.
 - 4. **When it is over it's over.** If an issue is solved in 20 minutes, and it is a 2 hour block participants can move to another group.
 - The Law of Two Feet

If anyone finds themselves in a place where they are not learning or contributing they can use their feet to go to another group. This can apply to participants who want to drift from meeting to meeting

"Afternoon News" After discussions in each group the group should be called back into the
main room. People should once again sit in a circle. The group should have an open mike so
members can voluntarily share any positive or interesting stories that have emerged from the
group.

- **Reporting out** If possible, throughout the day people should record important points within the ongoing discussion. An easy way to organize reporting is to have one Google doc where people can insert their notes and thoughts into throughout the day.
- Closing The day should end naturally. It is up to the facilitator to "feel" the group's energy and the best way to close the day. One suggestion is to use the Native American tradition of a talking stick. Have each member pass around a stick. Once in his or her possession the participant should be able to speak freely about events or issues from throughout the day.
- **Follow up** is important to use the energy and progress made from the retreat and parlay it into after action working groups. Allow a space in the office for people to post their ideas and sign up for after action groups once the retreat is over. The role of leadership should be to send a message of encouragement to post ideas and join working groups, while not being prescriptive. Leadership should listen to results and recommendations from these groups and act on them as appropriate.

When to Use: OST works best when there is a complex issue that leadership does not have an answer to. OST can be used in groups with 5 to 500 participants and should take place over a one to three day period.

OST relies on people's interest in the theme of the workshop or meeting to produce effective, frank, and useful discussion and action items. It is most effective when leadership takes a back seat, and there is a non-hierarchical approach and discussion of issues and interests. This allows people to raise relevant issues that are important to the group and important to them. Focusing on issues that people are invested in encourages energetic discussion and problem solving. This process empowers people to take initiative, responsibility, and follow up actions for their own ideas. It also highlights issues that would not be raised in a more formal setting.

Due to its structure as an open forum event, it will not be effective when there are issues with team dynamics, or tension with leadership.

- Open Space World (http://www.openspaceworld.org/cgi/wiki.cgi?WorkingInOpenSpace)
- Elemental Education (http://elementaleducation.com/wp-content/uploads/temp/OpenSpaceTechnology--UsersGuide.pdf)
- Sharing Knowledge (http://www.kstoolkit.org/Open+Space)

Problem Tree Analysis

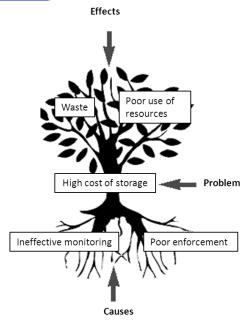
What: Problem tree analysis helps to find solutions by mapping out the anatomy of cause and effect around an issue. With this method, the problem can be broken down into manageable and definable chunks. It can provide better understanding of the problem and its often interconnected and even contradictory causes. This is often the first step in finding win-win solutions.

How: When building a problem tree:

- 1. Identify the major problem, state it as a negative condition, and place it in the diagram as the trunk of the problem tree;
- 2. Brainstorm all the specific causes that contribute—directly or indirectly—to the major problem.
- 3. Organize all the specific causes into direct cause-effect relationships and put them in the problem tree diagram;
- 4. Take each causal chain of problems through to as many levels as needed to complete the analysis; and
- 5. Identify the effects and consequences of the problem and organize them into direct cause-effect relationships as the branches of the tree.

When to Use: Like fishbone analysis, problem tree analysis should be used when trying to determine the root cause(s) of a problem or when there are several problems identified which are competing for attention from management.

- The Overseas Development Institute (http://www.odi.org.uk/publications/5258-problem-tree-analysis)
- Massachusetts Institute of Technology (http://web.mit.edu/urbanupgrading/upgrading/issues-tools/tools/problem-tree.html)



SWOT Analysis

What: A SWOT analysis is a business tool used to identify strategic issues within an organization by analyzing the **Strengths, Weaknesses, Opportunities,** and **Threats** of the organization. SWOT analysis can: 1) help a new group to focus on developing its mission and important strategies; 2) enable a group that has not been functioning as effectively as they could be to refocus their efforts and get on track; and 3) assist an organization to periodically renew its priorities in a systematic fashion.

How: The key steps in conducting a SWOT analysis include:

- 1. Brainstorming lists of strengths, weaknesses, opportunities and threats (remembering to keep the focus internal for strengths and weaknesses and external for opportunities and threats);
- 2. Taking the laundry-list of ideas within each category and reduce them to the top 5 to 10 ideas (per category);
- 3. Reviewing each category separately and discuss each of these ideas and the potential implications to the organization;
- 4. Remembering that the idea with SWOT analysis is to gain a better understanding of how the organization can relate to its external environment. As such, the next step is to look at the internal strengths and weaknesses of the organization and see how they relate to the opportunities and threats external to the organization; and
- 5. Looking at the following areas:
 - a. Those factors that represent both strengths of the organization and opportunities in the external environment. These represent potential areas for growth.
 - b. Those factors that represent weaknesses of the organization and threats in the external environment. These represent areas that need to be addressed.

When to Use: A SWOT analysis is a good tool for analyzing strategic opportunities and challenges with a group of people in a short time frame.

Additional Information:

California Polytechnic State University

(http://europeandcis.undp.org/ourwork/cd/swot_analysis.pdf)
United Nation Development Program (http://europeandcis.undp.org/ourwork/cd/show/802FBB5F-F203-1EE9-B5DD65625C9269A9)

Harvard Business School (http://orion2020.org/archivo/planeacion/04_swot1.pdf)

SWOT ANALYSIS



Trade-Off Analysis

What: Trade-off analysis is a decision making tool used after a team has identified a range of options for addressing operations issues. Trade-off analysis helps the organization select the best option(s) with the highest impact potential. Trade-off analysis usually includes developing a decision matrix which displays the various options with their respective scores against established decision criteria.

Example

OPTIONS	Criterion A: Lowers costs	Criterion B: Streamlines	Criterion C: Maximizes Performance	Criterion D: Stakeholder/Customer Acceptability	TOTALS
Criterion Weight	Max. 20 pt.	Max. 20 pt.	Max. 20 pt.	Max. 40 pt.	100
Option 1: Train existing staff	10	10	15	20	55
Option 2: Realign Staff	15	20	20	30	85
Option 3 : Reduce current staff and hire new expertise	10	15	20	10	60

How: A decision matrix allows decision makers to structure and then solve their problem by:

- 1. Define the ideal solution. Spend a few minutes thinking about the ideal solution. How does it look and feel? Try it on for size. Make a list of the key characteristics for the ideal solution.
- 2. Set Priorities. Which of these characteristics of the ideal solution are the most important? Assign a weight (percent) to each key characteristic. The weight establishes the priorities.
- 3. Assign the Points. Evaluate each option and give it a raw score for each key characteristic. Look at each option by itself and rate it according to how it meets the key characteristics.
- 4. Calculate the weighted scores. Use the raw score and the key characteristic weight (percent) to calculate a weighted score.
- 5. Add up the total scores. Add up the weighted scores to get the total score for each option. The option with the highest score is closest to the ideal solution.

When to Use: Trade-off analysis should be used when there are multiple options to consider with multiple decision makers, stakeholders, and other interested parties having inputs in the decision making process.

Additional Information:

U.S. Army Corps of Engineers (http://www.iwr.usace.army.mil/Portals/70/docs/iwrreports/02-R-2.pdf)